## Geotechnical Testing Journal Table of Contents Volume 26, 2003

Polymer Capacitance Sensors for Measuring Soil Gas Humidity in Drier Soils—B. A. ALBRECHT, C. H. BENSON, AND

No.	1	. M	arch

S. BEUERMANN	3
Interfacial Behavior of Unsaturated Soil with Small-scale Models and Use of Image Processing Techniques— PHILIPPE GACHET, GEORG KLUBERTANZ, LAURENT VULLIET, AND LYESSE LALOUI	12
Centrifuge Modeling of Tapered Piles in Sand—MOHAMMED SAKR AND M. HESHAM EL NAGGAR	22
Effect of Aging on Swelling and Swell-Shrink Behavior of a Compacted Expansive Soil—K. S. SUBBA RAO AND S. TRIPATHY	36
Method for Determining the Coefficient of Permeability of Clays-TAKEO MORIWAKI AND KEN UMEHARA	47
A Critical Assessment of the Moist Tamping Technique—J. D. FROST AND JY. PARK	57
Shear and Interface Strength of Clay at Very Low Effective Stress—ROBERT C. PEDERSEN, ROY E. OLSON, ALAN F. RAUCH	71
Ko-Volume Change Characteristics of an Unsaturated Soil with Respect to Various Loading Paths—H. RAHARDJO AND D. G. FREDLUND	79
A Comparative Study of Suction-Induced Seepage Consolidation Versus Centrifuge Consolidation—R. G. ROBINSON, T. S. TAN, AND F. H. LEE	92
Role of Soil Structure and Matric Suction in Collapse of a Compacted Clay Soil—SUDHAKAR M. RAO AND K. REVANASIDDAPPA	102
New Wave Equation Technique for High Strain Impact Testing of Driven Piles—ROBERT Y. LIANG	111
No. 2, June	
Introduction to the 25th Anniversary Edition—L. DAVID SUITS AND THOMAS C. SHEAHAN	123
A Letter From the President of ASTM International—JAMES A. THOMAS	124
Articles	
Experimental Investigation of Dynamic Response of Compacted Clayey Soils—GOKHAN INCI, NAZLI YESILLER, AND TAKAAKI KAGAWA	125
Numerical Simulation of Water Movement in the Suction Equalization of a Thermal Conductivity Sensor— FANGSHENG SHUAI, D. G. FREDLUND, AND L. SAMARASEKERA	142
Resilient and Permanent Characteristics of Reinforced Granular Materials by Repeated Load Triaxial Tests— FEREIDOON MOGHADDAS-NEJAD AND JOHN C. SMALL	152
Evaluation of Multi-Electrode Earth Resistivity Testing in Karst-M. J. S. ROTH AND J. E. NYQUIST	167
Automated Humidity System for Measuring Total Suction Characteristics of Clay-william J. Likos and Ning Lu	179
Specimen Size Effects for Fiber-Reinforced Silty Clay in Unconfined Compression—ENG CHEW ANG AND J. ERIK LOEHR	191
Centrifuge Modeling for Undergraduate Geotechnical Engineering Instruction—MANDAR M. DEWOOLKAR, TON GODDERY, AND DOBROSLAV ZNIDARCIC	201
An Innovative Method of Load Testing Deep Foundations—PHILLIP S. K. OOI AND LEONARD L. FREDERICK	210
Influence of Matric Suction on the Results of Plate Load Tests Performed on a Lateritic Soil Deposit—YURI D. COSTA, JOSE C. CINTRA, AND JORGE G. ZORNBERG	219

## 466 GEOTECHNICAL TESTING JOURNAL

An Evaluation of Geometric Factors Used in the Two-Stage Borehole Test (ASTM D6391-99) Using the Finite Element Method—SANGKARAN RATNAM AND KENICHI SOGA	228
Technical Note: A Testing Unit for Monitoring Wall Permeability In Situ—J. BRAUNS, A. BIEBERSTEIN, AND H. REITH	235
	240
Erratum	240
No. 3, September	
Variable-Head Field Permeability Tests in Driven Flush-Joint Casings: Physical and Numerical Modeling— ROBERT P. CHAPUIS AND DIAOUIDA CHENAF	245
Performing Undrained Shear Tests on Saturated Sands in a New Intelligent Type of Ring Shear Apparatus—KYOJI SASSA, GONGHUI WANG, AND HIROSHI FUKUOKA	257
Anisotropic Consolidation Behavior of Soft Bangkok Clay—TIAN HO SEAH AND SINAT KOSLANANT	266
Electro-Osmotic Consolidation of Soft Bangkok Clay Using Copper and Carbon Electrodes with PVD—DENNES T. BERGADO, INTHUORN SASANAKUL, AND SUKSUN HORPIBULSUK	277
Interface Behavior of Sands from Constant Normal Stiffness Direct Shear Tests—DANIELA PORCINO, VINCENZO FIORAVANTE, VITO NICOLA GHIONNA, AND SERGIO PEDRONI	289
Design of an Instrumented Flat Dilatometer—KEVIN P. STETSON, JEAN BENOÎT, AND MICHAEL J. CARTER	302
Compression Tests of Ultra-Soft Soil Using an Hydraulic Consolidation Cell—MYINT WIN BO, WONG KAI SIN, VICTOR CHOA, AND TEH CEE ING	310
Development of a Spreadsheet for Modeling SPT Stress Wave Data—CHRIS R. DANIEL, R. SCOTT JACKSON, JOHN A. HOWIE, AND BRIAN WALKER	320
An Experimental Study of the Mechanics of Two Weakly Cemented Soils—sc. R. LO, P. V. LADE, AND S. P. R. WARDANI	328
Resonant Column Testing: The Inherent Counter EMF Effect—YU-HSING WANG, GIOVANNI CASCANTE, AND J. CARLOS SANTAMARINA	342
Technical Note: A Double Cell Triaxial System for Continuous Measurement of Volume Changes of an Unsaturated or Saturated Soil Specimen in Triaxial Testing—JIAN-HUA YIN	353
No. 4, December	
The Use Of Embedded Stress Cells For Monitoring Pavement Performance—FERNANDO PUGLIERO GONÇALVES, JORGE AUGUSTO PEREIRA CERATTI, AND ADRIANO VIRGÍLIO DAMIANI BICA	363
Performance Evaluation of Automated Machines for Measuring Gradation of Aggregates—CRAIG BROWNE, ALAN F. RAUCH, CARL T. HAAS, AND HYOUNGKWAN KIM	373
Instrumentation of Anchored Segmental Retaining Wall—CHUNGSIK YOO AND KWANG-MOON LEE	382
Consolidation and Permeability of Transparent Amorphous Silica—JINYUAN LIU, MAGUED G. ISKANDER, AND SAMER SADEK	390
Shake Table Calibration and Specimen Preparation for Liquefaction Studies in the Centrifuge—HESHAM M. DIEF AND J. LUDWIG FIGUEROA	402
Design Criteria for Geotomographic Field Studies—AMERICO FERNANDEZ AND J. CARLOS SANTAMARINA	410
Strength and Deformation Behavior of Soft Bangkok Clay-T. H. SEAH AND K. C. LAI	421
Constant Rate of Strain Consolidation with Radial Drainage—TIAN HO SEAH AND TEERAWUT JUIRNARONGRIT	432
Design and Performance of a 1m Diameter Ring Shear Apparatus—RICHARD KELLY, DAVID W. AIREY, AND J. T. TABUCANON	444
Mechanical Behavior of a Pulverized Fly Ash Grouted Sand—IOANNIS N. MARKOU AND DIMITRIOS K. ATMATZIDIS	450
Technical Note: Alternative Encasement Materials for Clod Test—LISA KROSLEY, WILLIAM J. LIKOS, AND NING LU	461
Table of Contents to Volume 26	465
Index to Volume 26	467

